



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id  
**CATERPILLAR 953C 001794 (S/N BBX02954)**  
Component  
**Hydraulic System**  
Fluid  
**CASTROL HYPURON 15W40 (30 GAL)**

## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0800478</b>	WC0724553	WC0604511
Sample Date		Client Info		<b>21 Dec 2023</b>	15 May 2023	18 Oct 2021
Machine Age	hrs	Client Info		<b>9136</b>	8704	8171
Oil Age	hrs	Client Info		<b>1500</b>	533	1500
Filter Age	hrs	Client Info		<b>432</b>	533	500
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>10	<b>2</b>	2	0
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>3</b>	4	4
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

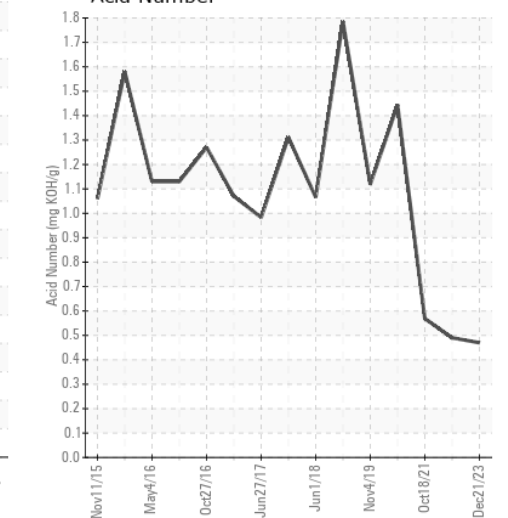
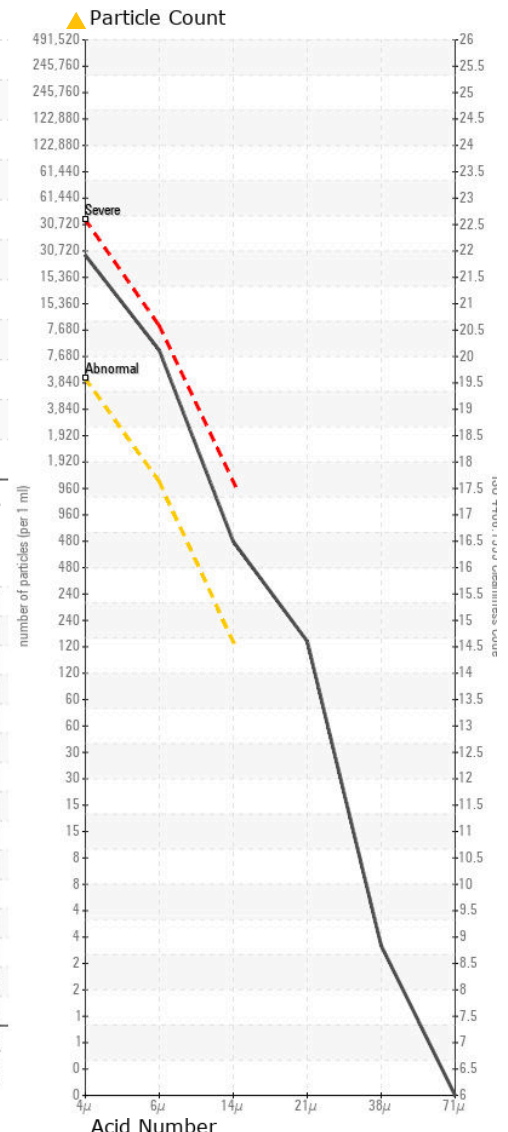
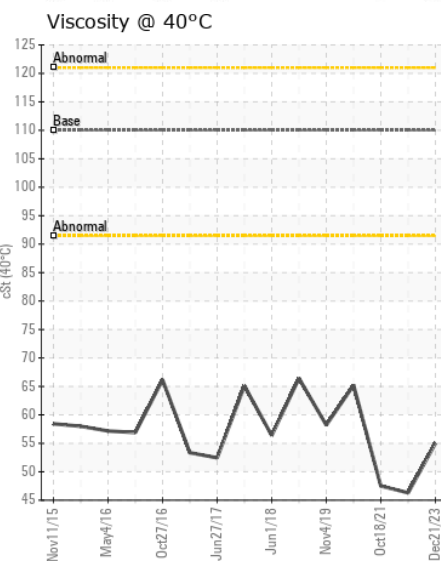
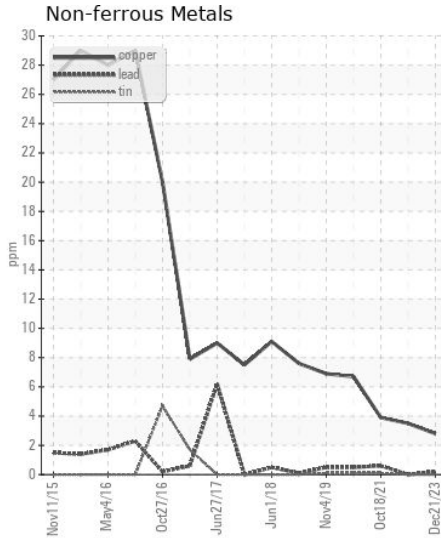
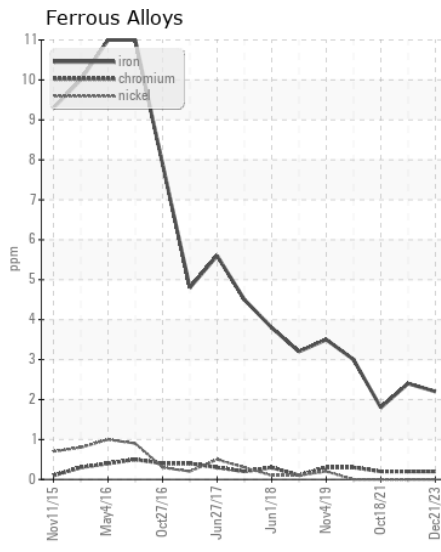
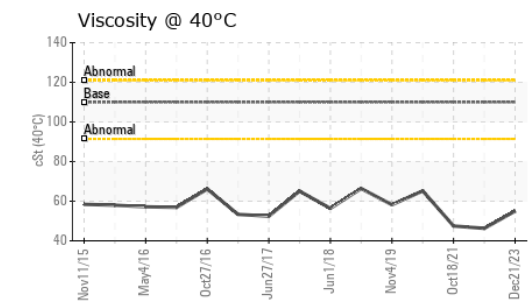
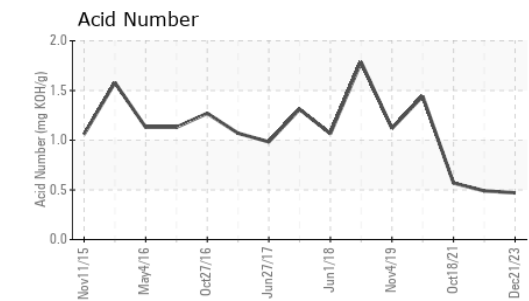
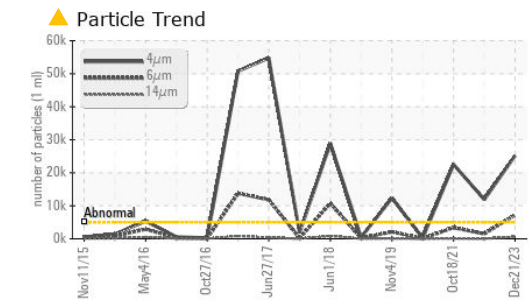
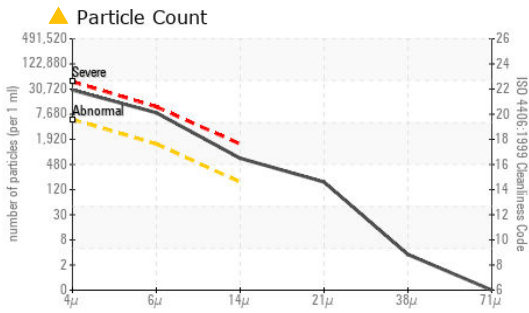
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>▲ 25173</b>	▲ 11898	▲ 22519
Particles >6µm		ASTM D7647	>1300	<b>▲ 7250</b>	▲ 1514	▲ 3388
Particles >14µm		ASTM D7647	>160	<b>▲ 594</b>	27	92
Particles >21µm		ASTM D7647	>40	<b>▲ 161</b>	5	22
Particles >38µm		ASTM D7647	>10	<b>3</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 22/20/16</b>	▲ 21/18/12	▲ 22/19/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	1	0
Boron	ppm	ASTM D5185m		<b>7</b>	10	14
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>5</b>	6	6
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>69</b>	61	51
Calcium	ppm	ASTM D5185m		<b>286</b>	322	354
Phosphorus	ppm	ASTM D5185m		<b>406</b>	398	449
Zinc	ppm	ASTM D5185m		<b>455</b>	473	539
Sulfur	ppm	ASTM D5185m		<b>1188</b>	1516	1311
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.47</b>	0.49	0.569
Visc @ 40°C	cSt	ASTM D445	110	<b>55.0</b>	46.3	47.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0800478 **Received** : 12 Jan 2024  
**Lab Number** : 06060177 **Diagnosed** : 16 Jan 2024  
**Unique Number** : 10831559 **Diagnostician** : Jonathan Hester  
**Test Package** : CONST

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To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)